# STATEMENT OF LEGAL AND FACTUAL BASIS

Hooker Furniture Corp.
Roanoke Plant
Permit No. VA-20523
Permit Date: June, 2001
Registration No. 20523
AIRS ID No. 51-161-0088

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, Hooker Furniture Corp. has applied for a Title V Operating Permit for its wood furniture manufacturing plant located at 2005 Greenbrier Avenue, SE in Roanoke City. The Department has reviewed the application and has prepared a Title V Operating Permit.

Engineer/Permit Contact:	Date:	June, 2001

# **FACILITY INFORMATION**

Permittee Facility

Hooker Furniture Corp.
East Church Street
Martinsville, VA 24115
Roanoke, VA 24013
(Roanoke Plant)

### SOURCE DESCRIPTION

SIC Code: 2511 - wood household furniture manufacturing.

This is a conventional wood household furniture manufacturing plant. It is located at 2005 Greenbrier Avenue, SE in Roanoke City. The plant receives and dries rough sawn lumber,

performs various woodworking and furniture assembly operations, and finishes the assembled furniture (primarily spray stains and spray lacquer). Finishes are primarily spray booth applied VHAP compliant high VOC wood furniture coatings. All spray booths utilize overspray particulate collection. All wood dust emissions are controlled by either closed loop cyclones or a few internal fabric filters without emissions, or baghouse fabric filters exhausting to atmosphere.

Most heat is supplied by the main boiler, a 33.5 million Btu/hr rated input capacity boiler firing the plant's dry process wood byproduct (wood fuel) that is fed pneumatically from the plant's wood fuel storage silo. Oversized wood is hogged before entering the fuel storage silo. Coal is the boiler's backup fuel. There is one other boiler, a small 3.4 million Btu/hr rated input capacity No. 2 fuel oil boiler.

The facility is a Title V major source due to emissions of VOC exceeding 100 tons/yr, combined HAPS exceeding 25 tons/yr, and exceeding 10 tons/yr for each of the following individual HAPS: methanol, toluene, xylene, and methyl ethyl ketone. All these HAPS are VOCs and VHAPS from finishing operations. This facility is located in an attainment area for all pollutants. It is a PSD definition major source due to VOC PTE emissions exceeding 250 tons/yr.

The overall facility was permitted by the 5-6-83 minor New Source Review (**NSR**) permit to modify (expand) woodworking operations, replace the finishing operations, and install the main boiler. The small 3.4 million Btu/hr No. 2 fuel oil 1972 boiler was not mentioned in the permit. The wood furniture MACT, 40 CFR 63 Subpart JJ, does apply to the facility. NSPS, such as 40 CFR 60 Subpart Dc, does not apply to anything at the plant.

# **COMPLIANCE STATUS**

The facility is inspected at least once per year. The facility was in compliance with the State Air Pollution Control Board Regulations during the last inspection, which was October 27, 2000.

### EMISSION UNIT AND CONTROL DEVICE IDENTIFICATION

The emissions units are grouped as follows:

**ES-B** Emission Source-Boilers. (Both boilers. B1: 1983 Hurst 33.5 million Btu/hr input rated capacity dry wood fuel, backup fuel is coal, multicyclone collector. B4: 1972 3.4 million Btu/hr input rated capacity No. 2 fuel oil.)

**ES-WD** Emission Source-Wood working. (All woodworking equipment with dust emissions, and includes hogging and collected wood fuel material transfers. All wood dust emissions are controlled by closed loop cyclones without emissions or baghouses.)

**ES-F** Emission Source-Finishing. (All finishing and related VOC emissions, primarily several spray booths. Rated capacity is 500 lbs/hr VOC throughput and emission averaged over 40 operating hrs/wk. The wood furniture MACT, 40 CFR 63 JJ, does apply to this facility. Overspray particulates are controlled by water wash spray booths or spray booth dry filters.)

# **EMISSIONS INVENTORY**

Emissions are summarized in the following tables.

1996 Actual Emissions from Title V permit application deferring to 1996 EIS update.

	Criteria Pollutant Emission in Tons/Year				
Emission Unit	VOC	СО	$\mathrm{SO}_2$	PM-10	$NO_x$
ES-B, Boilers 1 + 4.	1.5	4.7	3.3	1.4	4.1
ES-WD, Woodworking including hogging and wood byproduct transfers.	-	-	-	7.9	-
ES-F, Finishing and related.	249.0	-	-	0.0	-
Total	250.5	4.7	3.3	9.3	4.1

1996 Facility Hazardous Air Pollutant (HAPS) Emissions from Title V permit application.

Pollutant	Hazardous Air Pollutant Emission in Tons/Year
Methanol, Toluene, Xylene, Methyl Ethyl Ketone.	Major (over 10 tons/yr) of each individual substance listed.

Any Combination of the 189	Major (over 25 tons/yr) for the aggregate total of any
HAPS (primarily VOC	combination of all 189 HAPS (primarily VOC HAPS).
HAPS).	

# EMISSION UNIT APPLICABLE REQUIREMENTS - ES-B, Boilers B1 plus B4.

The primary boiler, B1, is a 33.5 million Btu/hr input capacity 1983 Hurst boiler controlled by a multicyclone particulate collector. Dry wood fuel is the primary fuel, coal is the backup fuel. Additional rated capacities are 2.09 tons/hr wood fuel or 1.34 tons/hr coal burned, 26,000 lbs/hr steam output. The boiler replaced an old one and was issued a new source review (**NSR**) permit on May 6, 1983. NSPS Dc does not apply due to the installation date of the boiler.

The other boiler, B4, is a small 3.4 million Btu/hr input capacity 1972 Continental boiler fired only with #2 fuel oil. It does not have a NSR permit.

#### Limitations

1. Particulate emissions from the wood fuel/coal boiler B1 shall be controlled by the use of a multicyclone.

(9 VAC 5-80-110, 9 VAC 5-50-260, 5-6-83 NSR permit unnumbered condition)

2. Sulfur dioxide emissions from the wood fuel/coal boiler B1 shall be controlled by the use of wood fuel and limiting the coal sulfur content and amount of coal burned, or DEQ approved equivalent.

(9 VAC 5-80-110, 9 VAC 5-50-260, 5-6-83 NSRPC\* 5 and 6)

\* **NSRPC** = new source review permit condition.

3. Particulate emissions from the distillate oil boiler B4 shall be controlled by the use of distillate fuel oil or DEQ approved equivalent.

(9 VAC 5-80-110, registration and actual physical installation)

- 4. Sulfur dioxide emissions from the distillate oil boiler B4 shall be controlled by the use of distillate fuel oil or DEQ approved equivalent.
  - (9 VAC 5-80-110, registration and actual physical installation)
- 5. The approved fuels for boiler B1 are wood fuel and coal, which shall not be fired simultaneously, or DEQ approved equivalent. The wood fuel shall be dry and hogged or smaller as fed to the boiler. A change in the fuels may require a permit to modify and operate.

(9 VAC 5-80-110, 5-6-83 NSRPC 7 and 15, 9 VAC 5-170-160)

- 6. The approved fuel for boiler B4 is distillate oil, or DEQ approved equivalent. Distillate oil is defined as fuel oil that meets the specifications for fuel oil numbers 1 or 2 under the American Society for Testing and Materials, ASTM D396-78 "Standard Specification for Fuel Oils". A change in the fuels may require a permit to modify and operate. (9 VAC 5-80-110, DEQ registration information, boiler design)
- 7. The maximum sulfur content of the coal to be burned in boiler B1 shall not exceed 1.1 percent by weight per shipment.
  (9 VAC 5-80-110, 9 VAC 5-50-260, 5-6-83 NSRPC 6)
- 8. The maximum ash content of the coal to be burned in boiler B1 shall not exceed 7 percent by weight per shipment.

  (9 VAC 5-80-110, 9 VAC 5-50-260, 5-6-83 NSRPC 6)
- 9. Boiler B1 shall consume no more than 6,200 tons per year of wood fuel, calculated as the sum of each consecutive twelve (12) month period.

  (VAC 5-80-110, 5-6-83 NSRPC 7, 9 VAC 5-170-160)
- Boiler B1 shall consume no more than 900 tons per year of coal, calculated as the sum of each consecutive twelve (12) month period.(VAC 5-80-110, 5-6-83 NSRPC 5, 9 VAC 5-170-160)
- 11. Emissions from the operation of the Hurst wood fuel/coal boiler B1 shall not exceed the limits specified below:

Total Suspended 8.0 lbs/hr 0.24 lbs/million Btu input (9 VAC 5-50-260) Particulate

PM-10 8.0 lbs/hr 0.24 lbs/million Btu input (9 VAC 5-50-260)

Sulfur Dioxide 56.0 lbs/hr (9 VAC 5-50-260)

(9 VAC 5-80-110, 9 VAC 5-50-260, 5-6-83 NSRPC 3 and 4, 9 VAC 5-40-900 A 1, 9 VAC 5-40-930 A 1)

12. Emissions from the operation of the oil fired boiler B4 shall not exceed the limits specified below:

Total Suspended 0.6\* lbs/million Btu input

#### Particulate

PM-10 0.6\* lbs/million Btu input

Sulfur Dioxide 2.64\* lbs/million Btu heat input hourly emission limit

\* Particulate and  $SO_2$  emission limits are actually much cleaner than these values due to another condition for this boiler limiting the fuel to distillate (No. 2) fuel oil. The No. 2 fuel oil definition limits maximum sulfur content to 0.5wt%, which calculates to only approximately 0.02 lb particulate/million Btu and approximately 0.52 lb  $SO_2$ /million Btu when using 1999 AP-42 emission factors.

(9 VAC 5-80-110, 9 VAC 5-40-900 A 1, 9 VAC 5-40-930 A 1)

13. Visible emissions from each of the B1 and B4 boiler stacks shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity.

(9 VAC 5-80-110, 9 VAC 5-50-80, 9 VAC 5-40-940)

14. There shall be no visible emissions of fugitive dust from boiler fuel or ash storage, handling or material transfer.

(9 VAC 5-80-110, 9 VAC 5-50-260, 5-6-83 NSRPC 11)

# Monitoring/Operation & Maintenance/Recordkeeping:

The permit includes requirements for monitoring and maintaining records of all monitoring and testing required by the permit. The monitoring and records include:

- 1. Visible emissions periodic monitoring is required to assure control equipment maintenance and compliance with permit visible emission limits. This requires a weekly observation, and its recording, of each operating boiler to check for any visible emissions. If any visible emission is observed, the condition shall be corrected and recorded, or a 40 CFR 60 Appendix A Method 9 visible emission evaluation performed and recorded to check opacity compliance.
- 2. Develop an inspection schedule, monthly at a minimum, to insure operational integrity of the boilers and multicyclones, and maintain records of inspection results.
- 3. Develop a maintenance schedule and maintain records of maintenance, have written operating procedures available, and train operators in the proper operation of the equipment and emission controls.

# 4. B1 wood and coal boiler:

- a. The permittee shall obtain for records a certification, or alternative statement since NSPS is not applicable to this boiler, from the fuel supplier covering each shipment of coal. Each coal supplier certification or alternative statement shall include the following: the name of the fuel supplier, date and tons of shipment, and the sulfur and ash content of the coal.
- b. Records of the monthly and annual throughput of wood fuel and coal burned in this boiler. The annual quantities shall be calculated monthly as the sum of each consecutive twelve (12) month period.
- c. Records of monthly particulate and SO<sub>2</sub> emissions in tons from this boiler calculated monthly. The emission factors, control efficiencies, and emission calculation equations used in these emission calculations shall be identified and readily available.

<u>Sulfur Dioxide</u>: (1) The sulfur dioxide emission limit in this permit, 56.0 lbs/hr, is inherently met by burning coal that meets the permit's coal sulfur limitation of 1.1% maximum sulfur content as follows:

(38S\*) x (S = 1.1) = (41.8 lbs SO<sub>2</sub>/ton coal burned) x (1.34 ton/hr coal rated capacity) = = 56.0 lbs/hr SO<sub>2</sub> emission.

(2) Coal meeting the permit limit of 1.1% sulfur inherently meets the 2.64 lbs/million Btu limit of 9 VAC 5-40-930 A. 1. as follows for each ton of coal:

$$(38S*)$$
 x  $(S=1.1)$  x  $(1/12,500$  Btu/lb x 2000 ppt coal) =

= 41.8 lbs SO<sub>2</sub> / 25 million Btu = 1.7 lbs/million Btu input.

\* 38S = AP-42, Table 1.1-3 emission factor lbs  $SO_2$ /ton coal burned.

# Particulates – Wood, Coal fuels:

The boiler was stack tested, which verified compliance, for particulate emissions by EPA Method 5 in April 1984 after boiler installation, when burning 100% coal, and when burning 100% wood.

<u>Particulates – Coal fuel</u>: Measured particulate emissions were in compliance when burning 100% coal at rated capacity +/- 10%. The Method 5 measured results were

5.2 lbs/hr and 0.17 lbs/million Btu, which were cleaner than the permit limits of 8.0 lbs/hr and 0.24 lb/million Btu. The corresponding emission factor calculates to be 4.3 lb/ton coal for this boiler  $[(0.17/1,000,000) \times (12,500 \times 2000) = 4.3 \text{ lb/ton}]$ , which is cleaner than the AP-42 Table 1.1-4 emission factors of 12 lb/ton PM and 7.8 lb/ton PM-10.

The permit 7 percent ash limit, combined with the permit 1.1 percent sulfur limit, assures use of decent quality stoker coal that is available in this area to burn relatively cleanly. The ash content is not used in calculating emissions from the AP-42 emission factors for particulates and PM-10 emissions.

<u>Particulates – Wood fuel</u>: Measured particulate emissions were in compliance when burning 100% coal at rated capacity +/- 10%. The Method 5 measured results were 4.95 lbs/hr and 0.14 lbs/million Btu, which were cleaner than the permit limits of 8.0 lbs/hr and 0.24 lb/million Btu. The corresponding emission factor calculates to be 2.3 lb/ton wood for this boiler [(0.14lbs/million Btu) x (8,000 Btu/lb x 2000 lbs/ton)], which is cleaner than the AP-42 Table 1.6-emission factors of 4.2 lb/ton PM and 2.6 lb/ton PM-10.

Basis: Wood = 8,000 Btu/lb; Coal = 12,500 Btu/lb; 33.5 million Btu/hr input rated capacity; multicyclone; boiler is not allowed to burn wood and coal simultaneously.

5. <u>B4 distillate oil (#2 fuel oil) boiler</u>: The permittee shall obtain for records a certification, or alternative statement since the boiler is not NSPS, from the fuel supplier covering each shipment of distillate oil. The particulate and sulfur dioxide emission limits in this permit for burning distillate oil in boilers are inherently met when burning #1 and #2 distillate oil.

Each fuel supplier certification or alternative statement shall include the following: the name of the supplier, date and amount of oil delivered, a statement that the oil complies with the American Society for Testing and Materials (ASTM) specifications for fuel oil numbers 1 and 2, and the sulfur content of the oil.

**Testing:** The permit does not require source tests for the boilers. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard. Visible emissions evaluations (VEE) shall use EPA 40 CFR 60, Appendix A, method 9.

If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method (40 CFR Part 60, Appendix A)
SO2	Fuel sulfur analysis, or EPA Method 6, or DEQ approved method
PM/PM10	EPA Method 5, or DEQ approved method
Visible Emission	EPA Method 9

(9 VAC 5-80-110)

**Reporting:** Title V semi-annual reports of the results of monitoring and recordkeeping for each first and second half calendar year are required to be submitted to DEQ by each March 1 and September 1 respectively.

# EMISSION UNIT APPLICABLE REQUIREMENTS - Wood Working - Refr. ES-WD.

This equipment group includes all of this typical wood furniture plant's wood working processes and equipment, including hogging and material transfers. All wood dust emission sources are controlled by either closed loop cyclones without emissions or baghouse filters. There is no applicable NSPS. There is no applicable MACT for the woodworking materials and processes currently used at this plant (but see further below for finishing).

## **Limitations:**

- 1. Particulate emissions from all particulate emission points for the wood working equipment (ES-WD), including wood working equipment, wood hogging and material transfers, shall be controlled by closed loop cyclones and four (4) fabric filters (baghouses). The fabric filters shall be provided with adequate access for inspection and maintained by the permittee such that they are in proper working order. (9 VAC 5-80-110, 9 VAC 5-50-260, 5-6-83 permit unnumbered condition and condition # 12)
- 2. Particulate emissions from each particulate emission point for the wood working equipment (ES-WD), including wood working equipment, wood hogging and material

transfers, shall not exceed 0.05 grains per standard cubic foot of exhaust gas. (9 VAC 5-80-110, 9 VAC 5-50-10 D, 9 VAC 5-40-2270)

3. Visible emissions from the wood working equipment (ES-WD), including wood working equipment, wood hogging and material transfers, shall not exceed five (5) percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity.

(9 VAC 5-80-110, 9 VAC 5-50-260, 5-6-83 NSRPC\* 12, 9 VAC 5-40-80, 9 VAC 5-50-80)

\* **NSRPC** = new source review permit condition.

# Monitoring and Recordkeeping:

The permit includes requirements for monitoring and maintaining records of all monitoring and testing required by the permit. The monitoring and records include:

- 1. Visible emissions periodic monitoring is required to assure control equipment maintenance and compliance with permit visible emission limits. This requires a weekly observation, and its recording, of each baghouse (fabric filter) exhausting to atmosphere in this emissions group to check for any visible emission. If any visible emission is observed, the condition shall be corrected and recorded, or a 40 CFR 60 Appendix A Method 9 visible emission evaluation performed and recorded to check opacity compliance. This requirement is to assure good control of particulate emissions. Refr. 9 VAC 5-80-110 E
- 2. The pressure drop across each baghouse shall be continuously measured and recorded weekly. This requirement is to help assure good control of particulate emissions.
- 3. Develop an inspection schedule, monthly at a minimum, to insure the operational integrity of the fabric filters, and maintain records of inspection results.
- 4. Develop a maintenance schedule and maintain records of maintenance, have written operating procedures available, train operators in the proper operation of the equipment and controls affecting emissions, and maintain an inventory of spare parts needed to maintain the fabric filters in proper working order to minimize emissions.
- 5. Record the annual throughput of wood, calculated monthly as the sum of each consecutive twelve (12) month period.
- 6. Title V periodic monitoring for meeting 0.05 grains/scf of exhaust gas TSP and PM-10

particulate emissions is satisfied by the periodic monitoring that assures good baghouse operation and that opacity requirements are met.

**Testing:** The permit does not require source tests for this process. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

**Reporting:** Title V semi-annual reports of the results of monitoring and recordkeeping for each first and second half calendar year are required to be submitted to DEQ by each March 1 and September 1 respectively.

# EMISSION UNIT APPLICABLE REQUIREMENTS - Wood Finishing - Refr. ES-F.

This group includes all finishing for this plant. It consists mostly of several spray booths. It includes all finishing related VOC emissions. 40 CFR 63 Subpart JJ, the wood furniture MACT, does apply. The plant's primary method for meeting the MACT currently is to normally use only compliant coatings where required. All the VOC that evaporates is emitted.

## Limitations

- Particulate emissions from each finishing spray booth shall be controlled by dry filters or water wash spray booths at a minimum. The overspray particulate controls shall be provided with adequate access for inspection and maintained by the permittee such that they are in proper working order.
   (9 VAC 5-80-110, 9 VAC 5-50-260)
- 2. The throughput of VOC in finishing and related materials shall not exceed 58 tons per month and 350 tons per year. The annual quantity shall be calculated monthly as the sum of each consecutive twelve (12) month period. These annual and short term throughput limits were created for this Title V permit per EPA policy to allow throughput recordkeeping to satisfy periodic monitoring to assure meeting the finishing VOC annual and s emission limits.

  (9 VAC 5-80-110, 9 VAC 5-170-160)
- 3. Emissions from the operation of the finishing process shall not exceed the limits specified below:

Volatile Organic Compounds 500. lbs/hr 350. tons/yr

The annual quantity shall be calculated monthly as the sum of each consecutive twelve

(12) month period.

(9 VAC 5-80-110, 9 VAC 5-50-260, 9 VAC 5-170-160, 5-6-83 NSRPC\* 13)

\* NSRPC = new source review permit condition.

4. Visible emissions from each finishing spray booth shall not exceed twenty (20) percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity.

(9 VAC 5-80-110, 9 VAC 5-50-80)

# Monitoring/Operation & Maintenance/Recordkeeping:

The permit includes requirements for monitoring and maintaining records of all monitoring and testing required by the permit. The monitoring and records include:

- 1. Visible emissions periodic monitoring is required to assure control equipment maintenance and compliance with permit visible emission limits. This requires a weekly observation, and its recording, of each operating emission point in this emissions group to check for any visible emission. If any visible emission is observed, the condition shall be corrected and recorded, or a 40 CFR 60 Appendix A Method 9 visible emission evaluation performed and recorded to check opacity compliance. This requirement is to assure good control of overspray particulates. Refr. 9 VAC 5-80-110 E.
- 2. Develop an inspection schedule, monthly at a minimum, to insure the operational integrity of the overspray collectors, and maintain records of inspection results.
- 3. Develop a maintenance schedule and maintain records of maintenance, have written operating procedures available, train operators in the proper operation of the equipment and controls affecting emissions, and maintain an inventory of spare parts needed to maintain the finishing overspray collectors in proper working order to minimize emissions.
- 4. Record the monthly and annual throughput of finish and related materials containing VOC in gallons, finish solids in tons, and VOC in tons for the VOC content of finish and related material. The annual quantities shall be calculated monthly as the sum of each consecutive twelve (12) month period. This requirement supplements the VOC emission calculations below to assure compliance with the VOC emission limits.
- 5. Record the monthly and annual VOC emissions in tons: The monthly and annual VOC emissions shall be calculated monthly, the annual quantities shall be calculated as the sum of each consecutive twelve (12) month period. The emission factors and emission calculation equations used in these emission calculations shall be identified and readily

available. Except for VOCs removed from the facility as liquid waste or unused material, all the VOC throughput evaporates to atmosphere. This requirement is to assure compliance with the VOC emission limits.

The equation to calculate VOC emissions is:

VOC emissions = VOC throughput.

VOC throughput = VOC received - VOC removed as liquid waste or unused material.

**Testing:** The permit does not require source tests for this process. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

If testing is conducted in addition to the monitoring specified in this permit, the permittee shall fise the following methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method		
VOC	40 CFR 63 Subpart JJ Wood Furniture MACT Certified Product Data Sheets, or 40 CFR 60 Appendix A method 24, or DEQ approved equivalent.		

(9 VAC 5-80-110)

**Reporting:** Title V semi-annual reports of the results of monitoring and recordkeeping for each first and second half calendar year are required to be submitted to DEQ by each March 1 and September 1 respectively.

# EMISSION UNIT APPLICABLE REQUIREMENTS - Facility Wide Conditions - 1. 40 CFR 63 Subpart JJ (Wood Furniture MACT).

This MACT is applicable to this plant. The mandatory compliance date has past. The plant is in compliance with the MACT. A facility wide condition requires the source to meet this MACT. Selected portions of the MACT (totaling several pages) are included in this permit. For the materials and processes currently used at this plant, the principal portion of the MACT that is applicable to this facility concerns the VHAPS in much of finishing. The plant's principal way of meeting the MACT is to normally use only MACT compliant coatings.

# STREAMLINED REQUIREMENTS

Streamlining 1: ES-B: Emission Source - Boilers as a single group. Both boilers are streamlined into a single group for simplification. The main boiler, B1, is a non-NSPS 1983 Hurst 33.5 million Btu/hr NSR permitted boiler fired with furniture plant wood fuel. Coal is the

backup fuel. The small 3.4 million Btu/hr B4 boiler fires only No. 2 fuel oil. It is a registered but non-permitted, non-NSPS 1972 boiler.

Streamlining 2: ES-B: Boilers - visible emissions. 9 VAC 5-40-940 limiting existing boiler visible emissions to 20% except for 60% during one six minute period per hour for the small No. 2 fuel oil B4 boiler is simplified to the more restrictive 9 VAC 5-50-80 and NSR permit limit of 20% except for 30% during one six minute period per hour for the larger wood/coal B1 NSR permit boiler. Both boilers will have the same opacity limit for simplicity.

Streamlining 3: ES-B: Boilers -  $SO_2$ . The 9 VAC 5-40-930A1 limit of 2.64 lbs  $SO_2$ /million Btu for each boiler is streamlined out to the more restrictive 9 VAC 5-50-260 BACT 56.0 lbs/hr  $SO_2$  and maximum 1.1% sulfur coal NSR permit limits for the bigger newer solid fuel B1 boiler, and limiting fuel to No. 2 fuel oil for the smaller B4 boiler. The B4 boiler No. 2 fuel oil means 0.5% sulfur maximum, which calculates to approximately 0.52 lb/million Btu with the current 9/98 AP-42 emission factor of 142S lb/1000 gal. where S = 0.5 maximum for  $SO_2$ .

Streamlining 4: ES-B: Boilers - Particulates. The 9 VAC 5-40-900A1 particulate limits for the two boilers are streamlined out by the stricter NSR permit 9 VAC 5-50-260 BACT 0.24 lbs/million Btu and corresponding 8.0 lbs/hr particulate limits for the bigger newer solid fuel B1 boiler, and registration/history/this Title V permit limiting fuel to No. 2 fuel oil for the smaller B4 boiler. Boiler B4 No. 2 fuel oil calculates to a clean fuel approximate 0.02 lb/million Btu with the current 9/98 AP-42 emission factor of 2 lb/1000 gal. for particulates.

Streamlining 5: ES-WD: Wood Working - visible emissions. (a) 9 VAC 4-40-80 limiting existing process visible emissions to 20% except for 60% during one six minute period per hour for any existing equipment and (b) 9 VAC 4-50-80 limiting new process visible emissions to 20% except for 30% during one six minute period per hour for any new equipment are streamlined to the stricter NSR permit limit of 5% except for 30% during one six minute period per hour permit per 9 VAC 5-50-260, BACT.

Streamlining 6: The May 6, 1983 NSR permit has a statement in the introduction preceding numbered conditions which states that finishing coatings shall comply with regulation 4.52(j)(2) until low solvent coatings become available. This statement is streamlined out of the Title V permit because it is obsolete. EPA, followed by Va. DEQ, have not had this regulation since some years before 1990 because EPA considers it to be an obsolete and ineffective ozone control strategy. It related to the old Los Angeles rule 6 or 66 dealing with the percentage of certain solvents in VOC emissions. The Va. regulation no longer exists, even in an updated form. The regulation is so obsolete that it seems to not be available to know its contents. Further, the 5-6-83 NSR permit did not require switching to low solvent coatings when they become feasible, which still does not appear to be anywhere on the horizon for the type of products produced at

this plant.

Streamlining 7: The conditions in the NSR permit are streamlined out which deal with new equipment installation time frames and startup initial notifications, and its initial visible emissions evaluations and initial stack testing because these conditions are obsolete due to having been completed for all permitted equipment.

#### **GENERAL CONDITIONS**

The permit contains general conditions required by 40 CFR Part 70 and 9 VAC 5-80-110, that apply to all Federal operating permit sources. These include requirements for submitting semi-annual monitoring reports and an annual compliance certification report. The permit also requires notification of deviations from permit requirements or any excess emissions, including those caused by upsets, within four daytime business hours.

## STATE ONLY APPLICABLE REQUIREMENTS

The following Virginia Administrative Codes have specific requirements only enforceable by the State and have been identified as applicable by the applicant:

NA. (The existing NSR permit for this plant does not contain any emission limits based on the state toxics regulations, perhaps due to the age of the NSR permit (1983)).

# FUTURE APPLICABLE REQUIREMENTS

NA.

# INAPPLICABLE REQUIREMENTS

NA.

# **COMPLIANCE PLAN**

NA because this facility is considered to be in compliance.

#### **INSIGNIFICANT EMISSION UNITS**

The insignificant emission units are presumed to be in compliance with all requirements of the Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping or

reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (5-80-720 C)
N/A	Total of three (3) lumber drying kilns	9 VAC 5- 80-720 B	VOC (approx. 0.3 tpy)	
N/A	Glueing	9 VAC 5- 80-720 B	VOC (approx. 2.7 tpy)	
N/A	Emergency Diesel Fire Pump	9 VAC 5- 80-720 C		235 hp
N/A	Maintenance Parts Washer	9 VAC 5- 80-720 A		

### CONFIDENTIAL INFORMATION

The permittee did not submit a request for confidentiality. All portions of the Title V application are suitable for public review.

### **PUBLIC PARTICIPATION**

A public notice regarding the draft permit was published in the Roanoke Times. Public comments were accepted from June 4, 2000 through July 6, 2000. The only comments received were from EPA. All the EPA comments have been addressed in the permit and statement of basis as requested and were returned to EPA 12-5-00 as proposed documents. EPA's 45 day proposed period ended 1-20-01. EPA e-mailed DEQ on 12-20-00 saying the proposed permit and statement of basis were acceptable.

20523T5V.SOB.doc June, 2001